

Montana Department of Transportation  
Research Program  
May 2002

**EXPERIMENTAL PROJECT  
FOR THE INFORMAL EVALUATION OF A COLD IN-PLACE RECYCLE  
USING KOCH PAVEMENT SOLUTIONS® CIR-EE PROCESS  
(Work Plan)**

**Location:** Highway 89 (P-3), Mileposts 19-28

**Project Number:** Fairfield North & South STPP 3-1(15)18

**Type of Project:** Cold In-place Recycle (CIPR)

**Principal Investigator:** Craig Abernathy - Construction Report/Annual Evaluations and Final Report

**Objective**

Experimental rehabilitation project consisting of cold milling approximately 75-90mm of asphalt cement, replace with cold in-place recycled using Koch's CIR-EE (Cold In-place Engineered Emulsion), plant mix surfacing (45mm & 90mm) and seal & cover.

**Experimental Design**

Mill off approximately 70-90mm of existing asphalt cement and recycle back with same using Koch's engineered emulsion process. Various overlay depths of 45-90mm with seal & cover. Two sections of straight mill and fill. The experimental breakout as shown below. Mile posting is approximate.

Visual inspection of the asphalt surface will include examining topical features and the logging of cracks (through mapping). The crack mapping will determine the average cracks-per-mile for each individual pavement treatment. Fixed data sites will be established at 300 ft. (91m) per location. These data sites ( as represented by the red arrows below) will be located at three stations within each treatment demarcation. Care will be taken to avoid transition areas. Sites will be referenced in the field by durable marking paint at logical reference points (mile markers, delineators, etc.) At the center of each data site a string line will be stretch across both lanes to collect rut data in each wheel path. Rut data will be averaged for the entire length of each

treatment. IRI data will be included in the annual and final reports.

### **Project Cost**

Construction plus CE: \$1,508,782.00 (per construction report)

### **Evaluation Schedule**

Research staff will monitor performance for a period of five years annually. Delivery of annual reports are required as well as a final project report (responsibility of the Research Bureau).

2001:	Construction	Construction complete
2002-2005:	Annual Evaluations	Annual reports
2006:	Final Evaluation	Final Report